

DIMENSIONS OF KNOWLEDGE CAPITAL

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Abstract : *The paper deals with the context in which the basis of competitive advantage and the functions of management have been fundamentally altered. These changes include a decrease in the cost of information flows, an increase in the number of markets and deregulation of international financial flows. Now, the new core business is development and deployment of intangible assets (knowledge). The traditional bases for competitive advantage, such as access to natural resources, access to skilled labor and ownership of plants and equipment, are being stripped away and superseded by the science and art of making the most from the organizational knowledge capital, seen as a strategic resource.*

Keywords: knowledge; competitive advantage.

1. Introduction

The need of orientation and coherent perception in the complex web of events, from which we could eventually identify and assess courses of development leading into the future, seems now more stringent than ever. It is related to the understanding of the nature of change and the urge to develop prevailing entrepreneurial innovation strategies having the appropriate dynamics and capacities to cope with change.

The transition from the industrial to the knowledge society turns out to be a radical change with far reaching qualitative and quantitative effects (Drucker, 1993). In the course of this transition wealth and employment of an economy are becoming more and more dependent on its knowledge and capacity to innovate, while the performance of the industrial society was predominantly built on the use of capital and the productivity in manufacturing goods.

In a traditional industrial economy, the roots for the development of productivity, value creation and wealth are set in the division of labor bringing about specialized work. In the case of a knowledge-based economy, the development of the capacity to innovate, value creation and wealth are based on the division of knowledge (Sveiby, 1997).

Knowledge, in contrast to goods and services, diffuses through interaction. Moreover, competence and knowledge grow in the process of using them, whereas goods and services are being consumed. The knowledge-based economy, therefore, needs a different and new institutional framework in order to fully develop to its potential. Many of the problems European economies are facing in the present have their origins in the difficulties, misconceptions and obstructions encountered in the

transition process to the knowledge-based economy rather than the intensely discussed process of globalization.

The dynamics of knowledge division and transformation enhances the capacity of organizations to build sustainable comparative advantages in international competition. The more specialized competencies and knowledge are developed, the more far reaching become the potentials for problem solving and linking to competent partners, and the more difficult it is for competitors to appropriate knowledge at the same level. Specialization, thus, creates advantages for competition and economic development.

We are living in an economy of kaleidoscopic change where the only element, which is constant, is change. The industry environment is being influenced by unexpected, multiple changes reducing the period for which organizations can hold on to a competitive advantage. Every sector of industry in every corner of the globe has been affected by this change.

One of the catalyst of this change has been the market which has also changed from a seller's market to a buyer's market. The buyers are more informed, thanks to the growth of Internet and consequently, information dissemination.

Organisations, over the years, have practiced many methods to create and sustain competitive advantage. These initiatives, although have resulted in firms attaining some competitive advantage, are replicable and not sustainable over a longer period of time. Hence, organisations are now focusing on methods of creating new knowledge and harnessing existing knowledge to gain sustainable competitive advantage.

The importance of focus on knowledge as a source of competitive advantage is understood better when one looks at the ratio of market value to book value of a knowledge intensive firm (e.g. *Microsoft*, *Infosys* etc.).

2. The strategy context

Strategy can be best conceived as a method/plan adopted by a firm to balance it's external environment (opportunities and threats) and the internal capabilities (strengths and weaknesses). Various management consultants and thinkers have defined the process of strategy in various ways. Porter's model focused on defining a firm's strategy in terms of it's product/ market positioning. Building on Porter's notion of competitive advantage, the resource based view of strategy argues that the resources and capabilities of an organisation can be a source of competitive advantage if they processes certain characteristics of being rare, durable and difficult to imitate, flexible and durable. If firms have resources with these characteristics, they can position themselves strategically on the basis of these resources and capabilities. Most of the tangible resources may not have these characteristics and hence organisations have to focus on intangible assets to be a source of competitive advantage. Many authors have

stressed on the strategic importance of intangible assets for firms to achieve competitive advantage.

Two issues are worth mentioning in this context: *a)* the shifting character of the environment; certain strategic responses are required when time-to-market and timing is critical, the pace of innovation is accelerating and the nature of future competition and markets is difficult to determine and *b)* the key role of strategic management in appropriately adapting, integrating, and re-configuring internal and external organizational skills, resources and functional competencies toward changing environment.

The main emphasis is on how to adapt to the changing environment, through organizational learning and innovation, for which knowledge is the base. This knowledge based view of strategy, which emphasizes building, and sustaining competitive advantage on the basis of the knowledge resources and capabilities of a firm has gained acceptance due to the following reasons:

- market is in a state of flux and going through a string of realignments;
- resources and capabilities are easily replicable;
- the unprecedented growth of information superhighway has accelerated the spread of explicit knowledge and consequently the speed of replicability;
- tacit knowledge gained through years of experience is not easily replicable. and hence any strategy based on market and product mix or resources and capabilities may not provide the firm with a sustainable competitive advantage.

The importance of integration of knowledge available in the organisation is also stressed upon by authors like Huff, who, argue that managers look upon collective knowledge and experience in constructing mental models of strategic issues and terms this as 'strategic frames' and any strategic decision is a combination of multiple strategic frames.

3. The knowledge management shift

Knowledge management refers to the way in which knowledge is gathered, stored, and applied. One of the central aspects of Knowledge Management is how one generates value from knowledge based assets, which can be classified into either *explicit* or *tacit*. Explicit knowledge refers to knowledge that is documented; for example, books, manuals, and other documents. Tacit knowledge refers to knowledge that cannot be documents and is only gained through personal experience which is often referred to as „know-how”; for example, wisdom and experience. The importance for such types of knowledge is largely due to the fact that organizations operate in a „knowledge society” characterized by economical, social, and cultural aspects being driven by information. As Albert Einstein once said „information is not knowledge” therefore we must highlight the significance of transforming our

information into knowledge. The importance on information is revealed in the fact that companies today are not so much differentiated by physical assets as they are by intellectual differences.

Various sources of knowledge as an asset exist. Among others, these sources range from books to company training to participation in communities of practice. The value of such knowledge can be seen in such examples as *the learning organization* where synergies are created within the company and the group produces exceptional results. Other benefits of utilizing knowledge as an asset are organizational innovation and learning that allows individual knowledge to be transferred, enlarged, and shared upwardly to the organizational level.

In today's fast paced global work environment, increasing an organizations level of efficiency means increased knowledge and profit. Efficiency can be defined as "a measure of effectiveness; specifically, the useful work output divided by the energy input in any system" and can be applied to any organization to maximize their advantage.

The need to focus on managing knowledge within the enterprise results from:

- economic and market-driven requirements created by customer demands and international competition;
- increase in customer demands for products and services that fulfil their particular needs more precisely and to a greater advantage;
- loss of knowledge to the organisation due to increased personnel turnover;
- it helps organisations to be able to repeat the processes followed in past successful projects;
- effective knowledge management practices helps organisations avoid repeating mistakes of past projects, thereby reducing the time span required for completing current projects.

The importance of knowledge is illustrated by the problem raised from the existence of the so-called 'strategic knowledge gap', i.e. the gap between what the organisation needs to know and what it does now and knowledge management is the process by which organisations could bridge this gap.

We are reaching the end of the second generation of knowledge management, with its focus on tacit-explicit knowledge conversion. Triggered by the SECI model of Nonaka (Nonaka, 1994; Nonaka and Takeuchi, 1995), it replaced a first generation focus on timely information provision for decision support which has substantially failed to deliver on its promised benefits.

The third generation requires the clear separation of context, narrative and content management and challenges the orthodoxy of scientific management. Complex adaptive systems theory is used to create a sense-making model that utilises self-organising capabilities of the informal communities and identifies a natural flow model of knowledge creation, disruption and utilisation. However the argument from nature of many complexity thinkers is rejected given the human capability to create order and predictability through collective and individual acts of freewill. Knowledge

is seen paradoxically, as both a thing and a flow requiring diverse management approaches.

4. Knowledge creation and dissemination

There are many ways in which knowledge can be created and disseminated across organisation. Any organisation that aims to create a knowledge management system should have to follow these general knowledge management initiatives:

- Creation of knowledge teams;
- Sharing of best practice;
- Development of knowledge pools;
- Creation of knowledge centres;
- Selection and use of collaborative technologies;
- Creation of intellectual capital teams.

5. Creativity, innovation and knowledge strategy

Creativity and innovation play a very important in designing and driving the business strategy of any present day organisation. In the present industry scenario, an organisation does not enjoy sustainable competitive advantage, merely by possessing resources and capabilities. They should be able to combine these resources in new and different ways or develop new capabilities to gain sustainable competitive advantage. This is possible through creative thinking and innovation and an appropriate alignment of KM strategy with their business strategy.

Organisations pursue different strategies to align their KM strategies with the business strategies. Some of examples of these strategies are:

- Use of automation and intensive application of ITC (codification);
- Building of a learning strategy (personalisation);
- Building, leveraging and exploiting knowledge-related assets (strategic management of intellectual capital).

6. Conclusions

In the current industry scenario of flux and uncertainty, organisations cannot achieve sustainable competitive advantage, by pursuing just a product-market based strategy or a resource based strategy. They need to appreciate the importance of the knowledge existing in the organisation and harness the knowledge through appropriate

knowledge management strategies and align this strategy with the business strategy. Moreover, they also need to create new knowledge through creative methods and build new capabilities to achieve sustainable competitive advantage.

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